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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,260	09/30/2003	Koichiro Mitsui	4635-003	2073

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EXAMINER

HAND, MELANIE JO

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/673,260

Applicant(s)

MITSUI ET AL.

Examiner

Melanie J. Hand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed July 13, 2006 have been fully considered but they are not persuasive.

With respect to applicant's arguments regarding the prior art of Gesp, the hook member 54 is capable of engaging side flap 12. Applicant correctly notes that adhesive 52 is a means by which the tabs engage the side flap, however the adhesive is not the sole means of engagement. Hook members 54 are capable of engaging the topsheet of the diaper, therefore when force is applied to activate the adhesive 52, the hooks 54b will engage the topsheet as well. Gesp teaches laminate assembly 10 from which the side flaps are formed.

With respect to applicant's arguments regarding the prior art of Tanzer, the attaching portion is defined by the entire tape tab area, and the openings are not in the hook portion, but rather they expose the hook portion, therefore Tanzer in fact does teach that the openings are separate from the hook portion.

### *Claim Rejections - 35 USC § 102*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 8, 9-13 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gesp et al (WIPO Publication No. WO 1997/28774).

With respect to **Claims 1-3**: Gesp teaches a diaper 10 with layered assembly 12 comprising a top sheet 28, a backsheet 30 and absorbent core 26 enclosed between said topsheet and

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backsheet. As can best be seen from Fig. 1, diaper 10 also has a pair of side flaps that extend outwardly and have longitudinal edges 22 and 24. (Page 8, lines 17-20, 23-26). Gesp teaches tabs 32 that comprise securement portions 50, 52 and 54 (Page 8, lines 26-31) Gesp teaches that securement portions 50,52 are comprised of adhesive and securement portion 54 is comprised of a multiplicity of hook elements 54b mounted on substrate 54c. (Page 11, lines 1-6) Securement portion 54 is therefore capable of engaging either of securement portions 50,52 for the purpose of temporary fixing of the tab, however as can best be seen in any of the Figures there exists a zone between securement portions 54 and 50,52 that is comprised only of nonwoven tape substrate surface 48b with no fastening means mounted thereon. Such a zone therefore would constitute a non-engaging region with respect to region 54, thus anticipating claim 2. Gesp teaches that distal end 36b of attachment element 36 is free of fastening means and therefore is capable of functioning as a thumb portion, thus anticipating claim 3. Since Gesp teaches that release element 42 is comprised a release substrate 56 comprised of materials that are also typically used to fabricate diaper backsheets (Page 12, lines 4-11), and that the peel strength of joint 68 with respect to release element 42 is relatively low compared to other portions of tab 32, the peel strength of joint 68 with respect to landing zone 34 will also be relatively lower than the rest of tab 32, resulting in regions of differing peel strength within tab 32 with respect to landing zone 34.

With respect to **Claim 8**: Gesp teaches that securement portion 54 is comprised of a multiplicity of hooks 54b (Page 11, lines 1-4), said hooks being the male component of a hook-loop fastening system.

With respect to **Claims 9,13**: Gesp teaches attachment elements 36 of tabs 32 that are attached to the diaper in the area of side edges 22,24, thus Gesp teaches an embodiment in which the tabs are attached to the inner sides of the diaper at side edges 22,24. Elements 36 are coated with adhesive on their inner faces 40 in areas corresponding to securement portions 50,52 that are capable of at least temporarily engaging securement portion 54. The substrate 32 upon which the securement portions 50,52,54 lie is capable of being folded about imaginary fold line F shown in Fig. 2 that is defined by either of side edges 22,24 to engage securement portions 50,52. (Page 10, lines 16-21) Gesp teaches that the tabs 32 operate as extensible diaper-side waistbands. (Page 9, line 35 – Page 10, line 1)

With respect to **Claim 10**: Tabs 32 are capable of being folded into such a configuration and thus can be attached to the diaper in such a configuration during assembly. It would be obvious to one of ordinary skill in the art to attach the tabs in such a manner as it merely constitutes an alternate configuration for the tabs 32 upon attachment that does not destroy the function of the instant invention, and such a configuration prevents premature wearing of the securement portions by providing a protective surface during storage and transport.

With respect to **Claim 11**: Gesp teaches a fastening configuration for tabs 32 by reference to U.S. Patent 4,066,081 to Schaar. Schaar teaches fasteners 50 comprising tape strips 52 attached at one end 62 to backing sheet 26 of pad assembly 22. ('081, Col. 2, lines 45-47)

With respect to **Claims 12,17**: Gesp teaches diaper 10 with fastener tabs 32 comprising securement portions 52 and 54. Securement portion 52 is comprised of pressure sensitive adhesive and is substantially incapable of engaging hook portion 54.

With respect to **Claim 16**: The side panels of the diaper taught by Gesp are defined by those portions of the topsheet and backsheet that extend beyond the absorbent core in the waist regions of the diaper, and are therefore comprised of an elastic material (backsheet) attached to a nonwoven fabric (topsheet). (Page 1, lines 15-20, Page 8, lines 17-22)

With respect to **Claim 18**: Please see the rejection of claim 1 in addition to the following: Gesp teaches attachment elements 36 of tabs 32 that are attached to the diaper in the area of side edges 22,24, thus Gesp teaches an embodiment in which the tabs are attached to the inner sides of the diaper at side edges 22,24. Elements 36 are coated with adhesive on their inner faces 40 in areas corresponding to securement portions 50,52 that are capable of at least temporarily engaging securement portion 54. The substrate 32 upon which the securement portions 50,52,54 lie is capable of being folded about imaginary fold line F shown in Fig. 2 that is defined by either of side edges 22,24 to engage securement portions 50,52. (Page 10, lines 16-21) Gesp teaches that the tabs 32 operate as extensible diaper-side waistbands. (Page 9, line 35 – Page 10, line 1) Depending upon the magnitude of the force applied to the tabs 32 for securement to the front waist region, the engaging portions are in direct contact and engaged with some, but not all, of hooks 54b of hook members 54.

With respect to **Claim 19**: As stated with respect to claim 18, certain hooks 54b will be engaged with the engaging portions while others will not. The “other” hooks which are not engaged can become engaged when a user applies force in a different area of the tab 32 or a force of a different magnitude.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4-7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gesp ('774) in view of Loescher et al (EP 974,326)

With respect to **Claims 4 and 5**: Gesp does not teach an engaging force for landing zone 34 with respect to hook portion 54. Loescher teaches a diaper closure system comprising tape tabs 10 comprising male fastening element 15 that engages female fastening element 100. (Fig. 1) Male fastening element 15 is comprised of hooks and female fastening element 100 is comprised of backing 101 and fibrous web structure 102 with a release-treated exposed surface 103. Loescher teaches that the peel strength upon engagement of the adhesive surface 19 of tab 10 with release surface 103 of structure 102 is less than 1.2 N/25mm. (Paragraph 0007, lines 24-26) Loescher teaches that a peel strength greater than 1.2 N/25mm results in contamination of the adhesive fastening surface 19 of tab 10 with fibers from surface 102, compromising the adhesive ability of surface 19 (Paragraph 0058, line 56 – Paragraph 0059, line 2), therefore it would be obvious to one of ordinary skill in the art to modify the tabs 32 taught by Gesp to have a peel strength with respect to landing zone 34 of less than 1.2 N/25mm as taught by Loescher.

With respect to **Claims 6,14**: As stated with respect to Claims 4 and 5, Loescher teaches that the adhesive surface 19 of tabs 10 (considered herein to be a non-engaging region with respect to hook elements 15) has a peel strength of less than 1.2 N/25mm with respect to release surface 103 of female element 100. Since this measurement corresponds to a peel strength

between two regions that are substantially engageable with one another, it is concluded herein that the peel strength between hook elements 15a and securement portions 50,52, two regions concluded previously herein to be non-engageable in a permanent capacity, will be less than that between securement portions 50,52 and release surface 103, and therefore no greater than 1.2 N/25mm, which is considered low per Applicant's disclosure (see Specification, Page 24, lines 4-10) and therefore satisfies the limitation set forth in Claims 6 and 14.

With respect to **Claim 7**: Gesp does not teach a percentage of area of the hook elements 54b that is occupied by their engaging portions, interpreted herein to be the "heads" of said hooks. Loescher teaches that the heads of hook elements 15a are of essentially uniform height (Paragraph 0030, Page 6, lines 52,53) and have an average maximum diameter to average maximum thickness ratio in the range of 1.5:1 to 12:1. (Paragraph 0030, Page 7, lines 1,2) A ratio of 1.5:1 translates to a percentage area occupied by engaging portion of 40%, and a ratio of 12:1 translates to an engagement portion area percentage of 7%. Loescher teaches that the prior art hooks of various shapes are also acceptable (Paragraph 0029, lines 50,51), therefore it would be obvious to one of ordinary skill in the art to substitute the hook taught by Loescher for the hook taught by Gesp with a reasonable expectation of success.

Claims 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gesp ('774) in view of Tanzer et al (U.S. Patent No. 6,730,069).

With respect to **Claims 15,20**: Gesp does not teach an opening in securement portion 54 or distal end 36b. Tanzer teaches a fastener comprising a first flexible layer 72 comprised of a stretchable laminate of nonwoven material and a second flexible layer 78 attached to the first

flexible layer. The first flexible layer contains islands of fastener material and the second flexible layer contains openings 80 corresponding to the location and size of each island. Tanzer teaches that the openings allow for exposure of the fastener island 64 therefore it would be obvious to one of ordinary skill in the art to modify the distal end 36b of the tab fastener taught by Gesp to contain openings as taught by Tanzer. ('069, Col. 9, line 67, Col. 10, lines 1,2, Col. 12, lines 57-65)

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
Art Unit 3761

MJH  
September 27, 2006

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

